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# ON HEATING A BAKE OVEN

*The following passage is taken from Chapter 5, Article 3 of Le Parfait Boulanger, (The Perfect Baker) by M. Parmentier, Paris, 1778, and has been translated from the original French by Jean and Gene Sheldon of Williamsburg, Virginia.*

The moment for firing the oven is determined by the seasons and the kind and quality of the bread to be baked. In summer, as the dough rises rapidly, especially when made into large loaves and of dark flour, one should start firing the oven when one begins to twist the dough. In winter when the dough takes much longer to ferment one fires the oven much later.

Any combustible matter can be used to heat the oven, so long as it gives a bright hot flame to heat the oven and also leaves embers to heat the hearth. Straw, dead leaves and plant stems would not give this double effect. Wood is the only material which can be used for the purpose.

The best kind should be not too green but not too old and dry. In winter the wood can be put in the oven to dry but in summer this is unnecessary. Placing the logs at the edges for a few moments between loads is sufficient. Even this dries up the wood and reduces its burning quality by removing the sap which feeds the flame and heats the oven evenly to the right degree.

Bakers who complain that their hearths do not last should check on their habit of throwing the logs into the oven. This damages the surface of the hearth and often the dome. Overdry wood is like old wood or coal and its heat does not spread out but stays concentrated, resulting in an overheated hearth and underheated dome. Green wood is also unsatisfactory, not burning brightly nor quickly enough. Green wood should be split and stacked at the edges of the oven as soon as a load of bread has been removed. But in order to preserve the hearth and dome for a long time it is wise to leave the oven empty after the last batch is finished.

All types of wood can be used but it is to the baker's advantage to choose wood which will burn brightly and for a long time without leaving too many embers or soot. Bakers who, for economy, use driftwood or deal make a mistake. The first has lost its combustibility through exposure to the water and the second gives little heat but a lot of embers. Beech wood, on the other hand, heats much better and goes twice as far. As is well known, painted wood is dangerous in the oven as its toxic qualities can be absorbed by the fermenting dough.

To prepare the oven for the loaves it is not enough to throw the wood in anyhow, light it and let it burn quietly until reduced to embers. The manner in which the wood burns and the intensity of heat which it gives out depends partly on the way it is arranged in the oven and the care taken in keeping it burning, with more or less flame, and in spreading the embers, thus giving an even heat in the whole oven.

We have already given the reasons which condemn the practice of putting wood in the oven to dry — it creates a fire hazard, the loss of humidity makes the wood less combustible and cools off the oven and, finally, putting the wood in and out of the oven damages the hearth. This is why the helper in charge of firing the oven should load the wood with a shovel and slide it gently into place leaving about a foot between the oven edges and the wood to facilitate the removal of embers with the ember hook. In any case, the oven is hottest at the edges and the bread would not only be overdone but dirty on the bottom.

Large logs are used for the initial firing of the oven. The amount is always determined by the interval between the completion of baking and the start of work on a new batch.

It is easy to keep the oven going when once started. It follows that the baker whose business only requires two or three oven loads, uses as much wood as the one who makes twice as much bread. Bakers who are not very busy and are reduced to one oven load cannot make expenses. Bakers' helpers often make the mistake of overheating the oven, either to speed up the work or because of a liking for overdone bread. They are even known among their companions for this fault and Master Bakers should go to any lengths to correct it.

Firing the oven would be the easiest of the operations connected with baking if it were possible to fix the quantity of wood by weight or number of pieces. This, however, varies with each season, each load and each kind of dough and requires intelligence and ingenuity on the part of the helper. One can well realize the worth of the baker's helper who understands this work, who can do it economically and who takes pains to do it with care and without sparing himself. This man's bread is always well cooked and never burned.

Bakers who have learned by experience to be careful will never allow themselves to be caught unprepared when the dough is ready. It is far better for the oven to wait for the dough than for the dough to wait for the oven to be ready. One can always maintain the heat in the oven whereas one cannot readily stop or start the fermentation of the dough.

It is true that this circumstance should rarely arise if one has followed the given instructions for the kneading of dough.

The oven consists of several parts and when firing it, these parts — the dome, the rear, the sides and the mouth — must be taken into account. They are known as the "quarters." The first part of the oven to become heated is the dome, as the flames naturally rise. The last part is the mouth, which is continuously cooled by the outside air.

The season will influence the moment when the oven should be fired. In winter, for instance, logs are put into the oven several hours after the last batch has been taken out so that they will light more easily. The wood is not lit until the kneading is finished and, in very cold weather, not until it is weighed, turned and set out to rise. In summer the wood is lit when the dilution of the sponge is begun, because often the first loaf shaped is ready for baking while the last batch is still in the oven.

Experience soon teaches the best way to arrange the wood in the oven. First one places a rather crooked log at the rear. This will serve as a support for the others and, being crooked, will allow the flames to circulate freely. Two other logs are then placed on the first with ends crossed and two more on these last so that the ends will reach to both sides of the oven and be about two feet from the mouth. The stacking of a number of logs in this manner is called the "charge."

The wood is lit by a burning brand placed at the rear of the oven facing the mouth. The highest part of the leaning logs burns rapidly. The smoke which pours from the lower ends and runs up the logs feeds the flames, making a bright hot fire without soot. In other words, just the right fire. Those logs which support the others would burn and make too many embers, which would overheat the hearth if one did not spread them out with an old peel or a poker and restack as before.

It would be a mistake to wait until the flames died down before thinking of heating the mouth of the oven. The embers, if they burned completely, would overheat the hearth, while the dome would not be hot enough. The embers must be removed — pulled toward the mouth of the oven with the large ember hook and then pulled with the small hook onto the shovel and dumped into the cinder pail. Were one to put the embers at the edge of the oven, the way some bakers do, they would be lost and the bread might be burned. All that is left in the oven is a brand to light it up.

The oven is not yet ready for even baking. The flames and the embers have not heated all parts of the oven, particularly the mouth, and it is most necessary to light a second fire in this spot.

This fire is made in the same manner as the first except that the logs are split instead of being whole. They are stacked on a slant on top of a burning brand about a third of the way into the oven with their ends reaching to the left and right edges. Six or seven may be placed in this way. The assistant must build the fire far enough into the oven so that the flames will be directed toward the dome and not out of the door and up the chimney where they might set fire to the soot, causing a chimney fire and disaster. As the logs burn down they must be restacked and drawn forward toward the oven mouth. If the dough is ready and there is no time to burn kindling at the mouth of the oven to heat it evenly, it is better to forego this advantage than to miss the right moment to load the oven when the wood is burned up and all is ready. Sometimes the embers must be removed very quickly in order to load the oven.

This is the way the wood is placed to fire and heat the oven on commencing work. The method is a little different when one comes to the successive loads of bread. Instead of using whole logs they are split in two or three pieces and, instead of placing them at the rear of the oven, as with the first load, they are placed at one of the sides.

A brand is put in the last quarter about one foot from the edge. The tip of the first log is placed on the brand and a second one crossed on the first, one end at the middle of the first and the other end toward the oven mouth. A third and fourth log are placed in the same way toward the front of the oven and from six to seven logs are used. If the oven is large, one must use larger logs or more of them.

This is about the way the oven is fired after the first batch has been baked. Sometimes one must add one or several pieces of wood in the first quarter, but these dry up first and catch fire only as the rest of the fire is reduced to embers. As each oven load is finished fewer logs are used because the oven, once heated, needs smaller fires. This is why the first firing is different from the succeeding ones.

If one is in a hurry to heat the oven one should split the logs and use more of them. To produce the same heat sooner the brand is lit before placing the wood so that the logs begin to catch fire as they are put into place. The oven door can be shut for awhile to retain the heat.

As the wood dries, the smaller flame can set it afire and produce a sudden blaze which spreads around the whole oven and is enough, in the case of flat-domed ovens, to give the desired temperature.

When the dough has been slow to be ready for baking and might not cook so quickly, the oven must be rapidly heated to a greater temperature to counteract this disadvantage. While one batch is baking one must split the logs and as soon as the first quarter is empty, the edges can be filled, as long as there is no more bread to be baked at the mouth of the oven.

When one is using two ovens and kneading two batches at once to be baked at the same time, the first oven should be heated right up to the mouth as one sets fire to the second. The dough must be just right so that there will be no delay in loading the second oven. It is impossible to hold back the dough once it is ready and the baker's assistant must be there to tend the second oven.

Some bakers, in particular those who bake large quantities of large and small loaves, have two foremen or kneaders and two helpers. Each one supervises his own work until it is in the oven assigned to him. Often one man bakes only small soft loaves while another bakes large firm loaves. In fact when the kneading and baking are done separately the bread is much better. In warm weather, no matter what care is taken with the kneading, the dough for the last loaves will still be in the rising troughs while the first ones are overfermented — which gives them a disagreeable and sour taste.

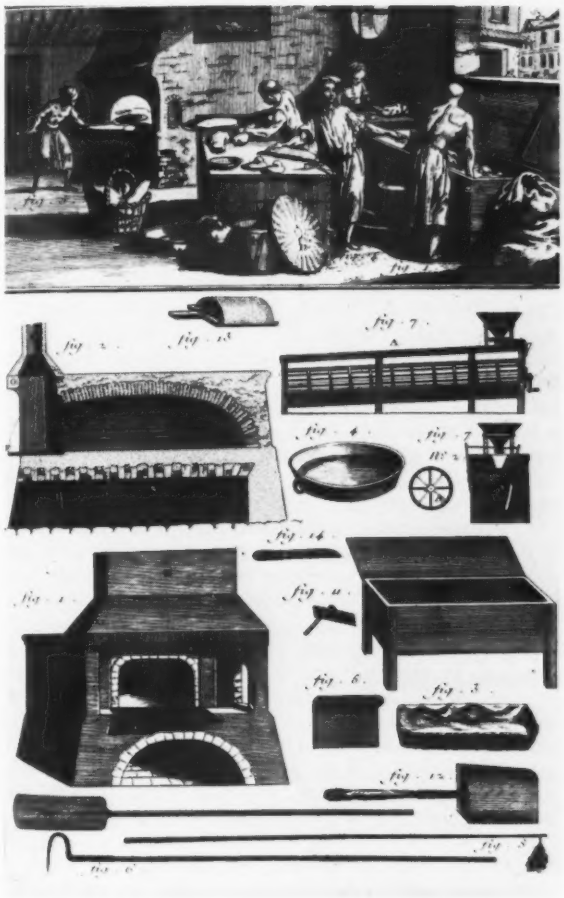
One would think that an economically heated oven would use more wood in proportion to the size of the loaves, but experience proves the contrary to be true. Large loaves, even though quickly put first into the oven, take longer to cook than small ones. If the oven were hotter the surface of the bread would cook too fast and the inside would stay damp and

imperfectly cooked. It should therefore be a rule that the large loaves be baked in the first oven-load, as the heat of the oven is less at the beginning of the work than at the end and also lessens as the loading is done.

The difficulty of knowing when the oven is at the right temperature has resulted in different ways of measuring the heat, such as throwing a handfull of flour into the mouth of the oven or rubbing the hearth and the dome with a stick. These methods, crude as they are, might serve as guides to those who bake at home. Bakers whose ovens are larger, hotter and fuller would only be misled. Some feel that the temperature is right if the dome takes on a whitish tinge, but this can be deceptive due to the shape of the dome and the height of the edges.

The location and position of the oven, the quantity and kind of dough, its shape and size usually determine the quantity of wood to be used and the oven is deemed hot enough when the wood is burned. The oven is then kept hot by the smoldering embers and the door is shut when it reaches the right temperature or becomes too hot.

It is almost impossible to determine exactly the quantity of wood to use, which way to fire the oven, when to begin firing and how long to keep it up. Although it should be easy, it all depends on the position, size and shape of the oven, the materials used for its construction, the thickness of the brickwork and, finally, on the temperature of the bake shop, number of oven loads and kind of wood which is used. High sides and dome and an outside wall make heating more difficult — the dome does not reflect enough heat and in consequence more wood must be used on the hearth. A lot of heat can be lost through too large a mouth or a badly fitting door. All these things are a stumbling block for the baker's helper who fires an oven for the first time. The helper must feel his way until experience and habit teach him to know his oven far better than all the recommendations one could give him.



*This engraving is taken from Tome II of Diderot's Encyclopedia and shows a bread baker. The illustration at the top of the plate shows a typical scene in a baker's shop. In this scene the following operations are visible; loaves being placed in a freshly fired oven, dough being kneaded and formed into loaves, ingredients being weighed, and ingredients being mixed and kneaded in a dough trough. In the lower part of the plate, figures 1 and 2, show details of oven construction. Notice particularly that the oven proper has no flue, smoke and gas from the fire escapes through the door which remains open while the oven is being fired. Figure 7 shows front and side views of a commercial flour sifter and the remaining figures show various small tools used by the baker. The four implements at the bottom of the picture are; the ember shovel for removing hot coals, the peel for putting bread in and out of the oven, the scovil, used to mop ashes out of a freshly fired oven, and the ember hook, used to rake out hot coals.*

*This engraving is taken from Tome VIII, Recueil de Planches, Encyclopedie ou Dictionnaire Raisonne des Sciences des Arts et des Metiers, Diderot and D'Alembert, editors, Paris 1751-1780. This monumental work is familiarly known as Diderot's Encyclopedia and is a primary source of reference for all students of the crafts. Pictured here is the shop of a pastry baker.*

# BOOKBINDING IN COLONIAL AMERICA

By C. Clement Samford

John Saunders, bookbinder, took the freeman's oath in Boston in 1636 and purchased a shop, presumably for his business in 1637. The first product of record from an American press to need the services of a binder, *The Whole Book of Psalms*, more generally known as the Bay Psalm Book, was not published at Cambridge until 1640. Nothing more is known about Saunders or his activities. George Parker Winship suggests that he probably had been connected with some printing establishment in England, since binding and printing had always been closely allied. It is reasonable to assume that he may have been associated with the early printing venture in Massachusetts Bay where his experience would have been valuable.[1] Throughout the colonial period, printing and binding were usually carried out in the same premises. As trained hands in either craft were scarce, it was often necessary for one to aid the other. Records of early printing offices cite numerous instances of this. Franklin, in his *Autobiography*, says that Keimer (his employer) employed Hugh Meredith and Stephen Potts, among others — that "Meredith was to work at press, Potts at bookbinding, which he (Keimer) by agreement was to teach them, though he knew neither one nor t'other."[2]

The materials essential to binding were mostly readily obtainable in colonial America. Since the earliest days, boards of wood or pasteboard, leather or vellum, glue, paste, pack thread for bands and linen thread for sewing, have been the basic materials necessary for most bindings. "Scabbord" (scaleboard-thing, birch or oak) was widely used in the early days in place of pasteboard which had to be imported for covers.[3] There was no problem about leather, as tanning was one of the earliest colonial industries.[4] Sheep, calf, and the skins of deer and other animals were widely used for a variety of purposes including bookbinding. Among the earliest tanneries were those in Virginia in 1630, and Lynn, Massachusetts a few years later.[5] In 1640 a Massachusetts law required that hides should be carefully removed and promptly taken to the tannery, and fixed penalties for the home tanner who produced an inferior leather.[6] By 1734, the report of the Lords of Trade stated that "a great part of the leather used in the country is . . . manufactured among themselves."[7]

Seventeenth century colonial books bear evidence that this leather was not always a finished product. It was often rough, and at best inferior in finish to the European leather. It was serviceable, however, and the many uses to which it could be put, combined with a very adequate supply of raw skins, promoted a very rapid growth of this industry. By the first decade of the nineteenth century, the annual total amounted to twenty million dollars.[8]

Flax for thread and vellum for parchment were also produced. Flax was grown in Massachusetts, Connecticut and probably Virginia as early as 1640.[9] Linen was one of the early cloth products. Not much vellum was used on colonial bindings compared to leather coverings in spite of its relative cheapness. There is evidence that some copies of The Bay Psalm Book, and possibly some of Eliot's Indian Bible was bound in vellum, though it was most frequently used on account books and ledgers.[10] Local vellum was used by the Maryland government in 1704 for engrossing the laws at a price of 18 pence a skin. By comparison, Franklin payed not much later three and four shillings for calf skins for binding operations.[11]

Certain other supplies such as morocco, milled binder's board, tools for decoration, etc., were not locally produced and had to be imported at considerable expense.[12]

Paper, also, was largely imported until well along in the eighteenth century.[13] In 1664, John Ratcliffe, the Boston binder, complained that "I find by experience that in things belonging to my trade, I here pay 18s for that which in England I could get for four shillings, they being things not formerly much used in this country."[14] Conditions were slow to improve in a country not essentially industrial in character, and the colonial binder often reverted to economic practices common in fifteenth century Europe. Temporarily out of boards, he would utilize waste paper, pasting the separate sheets together to make covering material. Left over printed matter for which he had no further use was ideal for this purpose, and consequently, many early Amercian bindings contain fragments which bear much the same relationship to early colonial imprints as the early Gutenberg fragments bear to the beginnings of printing. Ten different William Bradford imprints were recovered from the binding of a later volume, two of which had previously been unknown. *A Collection of the Governor's Several Speeches*, printed by James Green, in the Maryland Historical Society Library, was entirely recovered from a binding of the next year's session laws, its pages pasted together for binder's board.[15] The John Carter Brown copy of *The Compleat Laws of Maryland*, printed by William Parks in 1727, contains an extra title page announcing the inclusion of the Charter of Maryland in the volume. For some reason, the charter was never printed, and the rejected original title page was pasted down on the boards as a lining in this copy.[16] That future discoveries of great historical importance may be made in this fashion is highly probable.

Early colonial bindings were generally plain and utilitarian. Only such materials as were at hand were used freely. The craftsmanship was often clumsy and ornamentation was almost non-existant. Consequently, the average book bound in early colonial America consisted of little more than a scrap of leather drawn over the boards, often without any paring of the turned in edges. Backs frequently were not rounded, headbands did not exist for the most part, and leather thongs or pack thread on which the sections were sewn were frequently sunk into grooves to produce a smooth back. Lettering, if it occurred at all, was generally only a scrap of paper pasted on the spine, hand written in ink. Much of the leather used was rough calf of local manufacture, though account books were often bound in vellum and sometimes sided with paper, frequently marbled.

There were exceptions, however, as certain binders even from the earliest times occasionally used morocco imported from England and worked out more or less elaborately tooled designs in blind or gold leaf. Notable among these bindings are those of John Ratcliffe and Edmund Ranger of Boston in the seventeenth century and later, William Parks of Maryland and Virginia. The craftsmanship of the emigrant binder was always superior to the workman trained in the colonies,

and wherever extra pains were taken, evidenced by sewing on raised bands, general care in forwarding, the use of morocco and good calf, sewn headbands and gilt decoration, the craftsmen probably had served their apprenticeship in England or Scotland. Even so, the best work done in colonial America was not on a par with the average of the leading European centers, and a critical comparison would be unfair. Considering the limitations under which the colonial craftsman was forced to work, the absence of the patronage of royalty or wealth, the isolation from superior sources of supply, the economic and political factors present in the new country, etc., the amount of comparatively fine work which was produced is very impressive.[17]

The emigrant binder naturally followed the prevailing practices of the mother country in both technique and style of decoration. The "Cambridge style" had been very popular in England and is consequently found on the majority of the more elaborately decorated colonial books. The average book was decorated more simply. Raised bands were conventionally outlined by fillets, and the board edges were almost always decorated by lines or a narrow flower roll. A single or double line might be run around the front and back boards. Often, the only gold used was on the board edges, the rest being "blind."

Some form of the basic panel design was found throughout the colonies. Boston and other New England bindings make constant use of it. The early Philadelphia bindings are also typical, as are also, almost without exception, the Maryland and Williamsburg bindings of William Parks. Two striking examples of this style are the *Charter of the College of William and Mary*, Williamsburg, 1736, printed by William Parks (John Carter Brown Library, Providence, R. I.), and Franklin's *Cato Major* of 1744, (American Antiquarium Society, Worcester, Mass.), a presentation copy to Thomas Clap, President of Yale. Sometimes other decorative schemes were used. A fillet or decorative roll around the boards, with small fleurons at each corner and a central ornament — a larger fleuron or a design built up from small tools is fairly frequent. Mather's *A Call from Heaven*, (Alderman Library, University of Virginia), bound by Ratcliff in green morocco is an especially attractive example of this style. Occasionally an allover design is encountered, built up of many small tools, but these are exceptional. These more or less elaborate examples of blind and gold tooling serve to show that the colonial binder could on occasion produce work of a high calibre, being limited mainly by the demands of his market. That this work was actually done in English America is supported by a consistently inferior technique in handling the tools, when compared with the more finished efforts of Continental binderies.[18]

Samuel Willard's *Compleat Body of Divinity*, (Boston Public Library and Columbia University Library), printed in 1726 by Keeland and Green, is probably the first colonial book with gilt lettering on the spine.[19] However, books continued to be bound without lettering or labels until well into the nineteenth century, except for the work of the emigrant binders. Their books, from the early part of the eighteenth century, carried labels, generally of red leather, and their spines were frequently decorated.[20] Gold was not widely used before the Revolution, and was generally confined to double fillet lines around the boards, or bordering the bands across the spine. Gold tooling, however, had been done in the seventeenth century by Ratcliff and Ranger, among others.[21] Inventories and accounts of this period list gold leaf letter stamps, and various gilding tools, as well as charges for books bound "gilt." It is generally impossible to say how simple or elaborate these "gilt" bindings were. References to the use of gold are too numerous to list completely. The day books of William Hunter and Joseph Royle of Williamsburg, for example, list numerous purchases of gold leaf in quantity, and many charges for binding "gilt"; as do also the accounts of Franklin and others.

The ornamental tools used by colonial binders were mostly identical to those in use by English and French binders of the period. An extensive examination of colonial bindings has been made for this study, and the decorative tools are traceable as far back as the sixteenth century. As the goldsmiths of the various centuries and nationalities were responsible for the original designs, and as duplication was possible only through re-cutting of new tools by hand, slight variations and elaborations can be noted, which often enables us to establish within reasonable limits, not only the date of an unidentified binding, but its locality, and sometimes even its binder. The tools used in colonial America by the emigrant binders could be brought in by them duty free, but as it is not known that any binders tools were manufactured in the colonies prior to 1768, it has been assumed that local craftsmen had to import them at considerable expense — a circumstance which would certainly limit their supply, and consequently a chance to develop their skill in using them. There were goldsmiths in the colonies in considerable number at the time of the revolution, and some as early as the late seventeenth century. While it is not probable that any of them specialized in cutting binder's tools at a time when the binder himself had to serve in several capacities, it is possible that an occasional smith turned out work of this type. The first mention that is known concerning the actual making of bookbinder's tools is the following advertisement in the *Pennsylvania Chronicle* for April 18, 1768:

> "James Smither, Engraver, At the first House in Third Street, from the Cross Keys, Corner of Chestnut-Street, Philadelphia, performs all Manner of Engraving in Gold, Silver, Copper, Steel, and all other Metals — Coats of Arms, and Seals, done in the neatest Manner. Likewise cuts Stamps, Brands, and metal cuts for Printers, and ornamental Tools for Bookbinders. He also ornaments Guns and Pistols, both engraving and inlaying Silver, at the most Reasonable Rates."[22]

It was in this year that Abel Buell, of Killingworth, Connecticut, was making his first experiments in cutting and casting type.[23] Perhaps further research will be able to establish that native craftsmen were able to supply the colonial binder with some of his tools at an earlier date.

Much of the product of the early American press did not call for any elaborate binding. Session laws, assembly proceedings, pamphlets, sermons, and the almanacs, were frequently only sewn and covered with a piece of paper "drawn on" — pasted to the end papers, front and back. This cover was ordinarily either plain or blue, or sometimes marbled paper. The paper known as "Dutch Gilt," decorated with gold stamped animals, Biblical characters, or other de-

signs also was used. The John Carter Brown copy of the *Charter of the City of New York*, printed by John Peter Zenger in 1735, is covered with an unusually well preserved example of this paper. These books and pamphlets, essentially very simple and hardly to be described as "bound," provided a cheap, bright, contrast to the more common dull brown calf-skin so common to the period, and were evidently very popular.[24] Colonial Williamsburg owns some excellent examples of small blank books, ledgers, and "pocketbooks," as well as alphabets and ledgers, covered with marbled paper in this manner. Cloth as a binding material was occasionally used during the eighteenth century. These cloth bindings are not to be confused with the elaborate velvet and embroidered ones from an earlier date in England and on the continent, but were of canvas, linen, or calico-like material. The Government of Maryland commissioned William Parks to bind some of the early laws in canvas in 1729.[25] Franklin's account for July 16, 1732/3 lists the following item:

"Dr. do (Thomas Hopkinson for) covering with linen 1/6"[26]

A letter from Thomas Longman of July 21, 1772 to Henry Knox, Boston bookseller, speaks of a shipment of books from England in canvas bindings. Isaiah Thomas also made use of cloth in his early days at Worcester.[27] While the use of cloth certainly was not widespread, it is interesting to note the beginnings of a practice which in the nineteenth century revolutionized the printing and binding industries.[28]

We do not know precisely what were the hours of labor in the colonial printing office. That the hours were long and the wages "something less than munificent,"[29] though the journeyman printer had always been one of the best paid craftsmen, is amply attested by Franklin in his *Autobiography*. Daylight was largely depended upon to set the printing office hours as composition by candle light was neither popular nor practical. In England, it had been the custom to work up to eighteen hours a day as shown by the following statement of James Watson of Edinburg. He attributes the poor quality of Scottish printing to "the little esteem we have for Press-Men, and the narrow prices given them." He continues:

> "The Dutch, who, it must be acknowledged, are the neetest Printers in the World, have different Thoughts of them: They give larger wages to good Press-Men than to Compositors: They will not allow a Press-Man to work above Eight or Nine hours in a day, lest by working much they work not well. But here and in England, he that works Seventeen and Eighteen Hours is recon'd a choice workman: And indeed there is a Necessity for working much, their Wages are so small . . . For my Part, I'd rather give a Crown a Day to a good Press-Man, who brings Reputation to my work and preserves my Letter, than Eighteen Pence to one who must certainly destroy it by careless and base Working."[30]

The bookbinders' wages during the colonial period are not so easy to determine. Records for journeymen printers' remuneration are fairly clear, however, and as the binder so frequently served in a dual capacity, or vice versa, it may be assumed that their wages were on much the same level. In general, printing office records for wages and charges for printing and binding show very little variation for the entire colonial period. A document in Benjamin Franklin's hand and endorsed by Isaiah Thomas gives the following price scale for printing and journeymen's wages:

*"Prices of Printing Work in Phila. 1754*
*Books per Sheet"*

"Compute Journeyman's Wages at Press and Case, treble the Sum, and that is price per Sheet for the Work. If you find Paper, allow yourself at least 10 per cent in the price of it.
For Pamphlets of 3 Sheets, and under, 'tis best to agree at so much a Piece. Compute the Price by the above Rules, add the Paper, then add for folding and stitching 6d per Quire; devide the whole Sum by the Number to be done, and if the Cost of each Book be above 3d, call it 3d½; if above 3d½, call it 4d. &c. and fix the retail Price at ½ or a 3d more, as may be found most convenient.
Single Advertisements, of a moderate length, 5/- in the Gazette, small and middling Advertisements at 3/ the first week, and 1/ per Week after, or 5/ for three Weeks. Longer ones to be valued by Comparison with the foregoing; as if 20 lines be a middling Advertisement, Price 5/ for 3 Weeks, one of 30 will be 7/6d &c. judging as near as you can, by the Sight of the Copy, how much it will make.

Blanks for Offices, ½ Sheets, No. 300 and upwards, Printing 1d a Piece.
Broadsides Ditto 2d a Piece.
Hatters Bills 25/ per 1,000.
Paper Money 1d per Pound, besides Paper and Cuts.
Party-Papers, Quadruple Journeymen's Wages.
Bills of Lading 6/ per Quire.
Apprentices Indentures 8d a Pair, 6/ per Doz.
Bonds 4d Single, 3/ per Doz. 5/ per Quire.
Bills of Sale 3d — 2/3d per Doz.
Powers of Attorney 4d — 3/ per Doz.
Portage Bills 8d each.

*Journeyman's Wages*

For composing Sheet Work, 6d a 1000 Letters, to be reckoned by m's, and laid on its side between 2 Letters.

*Small Jobs reckoned by the hour at 9d per hour.*

For composing an Advertisement, or any such small job, in Quarto, Great Primer or Double Pica, - 6d.
Folio Ditto - 1/

Blanks, 1 Side of Half a Sheet, in English or Pica, Pot or Pro Patria Size, - 1/6d.

And other Jobs proportionately, according to Size of Paper and Letter.
Presswork, 12d per Token, which is too much, if Pressman had constant Work, as compositors; but in America Numbers being generally small, they must often stand still, and often make ready.
For Jobs — An Advertisement, 60 No or 100, 6d — and 6d per 100 more.
If work makes less or more than even Tokens, all Numbers above 5 Quires to be reckoned a Token; all under, nothing; i. e. 4 Token and 5 Quires is but 4 Token; 4 Token and 6 Quires, 5 Token, &c."
Another entry in his Work Book for July 16, 1764, gives the following charge for a specific printing job.

"Thomas Ringold Esq. — Dr.
To Printing Remarks upon a Message sent by the Upper

to the Lower House of Assembly of Maryland 500 copies making 4½ Sheets at 50/ (a) Sheet.

| | |
|---|---|
| making 4½ Sheets at 50/ (a) Sheet | 11- 5-0 |
| To 5 Reams & 5 Quires of Paper for Do. at 14/ | 3-14-0 |
| To folding and Stitching Do | 2- 0-0 |
| To Box for Ditto | 7-6 |
| | 17-6-6"[31] |

According to the above schedule, the 50 shillings a sheet in this account represented a labor cost of about 17 shillings a gross profit to the printer of 33 shillings for each of the four and a half sheets. Add to this the 7 shillings representing the 10% profit on the cost of paper, he took from this job a gross profit of around £ 8. If office time, rent, lost time of workmen, deterioration of equipment, and other overhead charges reduce this amount to 16, his net gain on a typical pamphlet job was roughly 35%.[32]

The only charge in this account which could involve the binder is for folding and stitching. What was actually paid for binding during the colonial period is shown more clearly in other records. In 1662, Samuel Green charged 6 pence each for 200 copies of the *Indian New Testament*. This was a quarto of 33 sheets bound in leather. Two years later he received 2s 6d, each for binding 200 copies of the whole Indian Bible, a quarto of 150 sheets, bound in full leather with clasps. John Ratcliff, the Boston binder, received the same amount for those copies of the Bible bound in his establishment. He felt, that because of cost of materials, etc., that this was inadequate, and stated that he could not live comfortably on a rate less than 3s. 4d, or 3s. 6d, a book, "one Bible being as much as I can compleat in one day, and out of it (i. e., 2s. 6d, a copy) finde Thred, Glew, Pasteboard and Leather Claps, and all which I cannot supply myself for one shilling in this country."[33] In 1714, Elizabeth Short, the widow of Thomas Short, Connecticut's first printer, bound 2000 copies of the *Saybrook Platform* on eight sheet octavo printed by her husband in 1710 for 150s.[34] This is the first recorded instance of binding being done by a woman in America. It is a rather crude job in leather over birch boards, and the 6d per copy was probably good enough pay for quantity production.

In 1731, Franklin paid his Journeyman-binder, Stephen Potts, 8 shillings for binding a Bible, 3s 6d. for two other books, and six pence for two blank books.[35] In 1734, Franklin charged Thomas Penn £1. 10s for binding "a great book of Birds."[36] The description suggest that this might have been Catesby's *Natural History of Carolina*, vol. 1 of which was printed in London in 1731, which would explain the size of the charge. Franklin billed his customers in these cases for the amounts credited to Potts, with no profit for himself.[37] There would appear to be a great difference in the amounts paid to Ratcliff in 1663 for binding the Indian Bible, (2s,6d) and to Potts for a Bible in 1731 (8s) but in addition to the probable size of the books, the former was an edition job, the latter a custom one. On edition work, Franklin's charge in 1731 was the same as that of Mrs. Short's seventeen years earlier—6d a copy for 1000 copies of Arscot's *Some Considerations*, a book of sixteen sheets, issued in two parts in 1732. In 1769, Hugh Gaine of New York informed William Johnson that binding the *Mohawk Book of Common Prayer* — an octavo of 26 half sheets, in plain leather would be 2 shillings currency a volume instead of the original estimate 1s. 6d. Those bound in morocco for which he must send to Boston, would cost an unspecified amount more.[38] In 1775, Valentine Nutter, a New York binder located opposite the Coffee House, charged Gaine 1s. 6d. a volume for 200 sets of *Chesterfield's Letters*, a duodecimo in four volumes at an average of 19 sheets each.[39] Timothy Green of New London received 5s. a copy for binding an edition of 505 copies of the Laws of Connecticut of 1784. This was a folio of 71 sheets.[40] The wages of John Stretch bookbinder and journeyman for William Hunter of Williamsburg, are recorded as amounting to £98.45 from Jan. 14 to Dec. 31, 1751.[41]

The number of sheets in a volume and the format are important in comparing the cost of binding, as the binder received the books from the printer in sheets, flat, and before the actual process of binding began each sheet had to be folded by hand to accord with the format — once for a folio, twice for a quarto, three times for an octavo, and so on, and great care was needed to be certain that each resulting page followed the correct numerical sequence. This, and the succeeding operations of collating, pressing, and beating to make the signatures lie flat and the final collating and gathering before sewing the signatures — the first step in forwarding the volume was very time consuming.

The colonial printing office was always plagued with labor scarcity. While existing printing office records have often left the craftsmen actually engaged in binding in a singular anonymity, it is known that skilled hands in this trade were very scarce; and strong inferences may be drawn from the general labor situation and a few specific references that the binder in most cases was recruited from the ranks of journeymen printers and had to work in several capacities in the shop. From the beginning the printing office was very much a household establishment. Women and children in the family were a source of help too readily at hand to be overlooked. There are numerous instances of widows having taken over the operation of their husband's establishments. Among them are the widow of the Reverend Jose Glover in Cambridge; Dinah Nuthead and Anne Catherine Green in Maryland; Anne Timothy and Elizabeth Timothy in South Carolina; Ann Franklin, Sarah Updike Goddard and Mary Katherine Goddard of Rhode Island; Jane Aitken of Philadelphia and Clementina Rind in Williamsburg.[42] It is probable that women did more binding than the records show. From 1714 when Elizabeth Short bound the *Saybrook Platform* to the end of the century hardly any mention of women in this field has been found; but directories of the first years of the nineteenth century name six women binders in Philadelphia alone. Jane Aitken, who continued her father's printing establishment after his death in 1802, managed it in a thoroughly competent manner and executed some exceptionally fine bindings. It is evident that she must have had long experience in her father's printing office. That more women binders are not recorded throughout the eighteenth century is probably due partly to the custom of listing only the heads of families in the directories and partly to the general anonymity of binders.[43]

Aside from the family helpers, labor needs were supplied by the emigrant craftsman, apprentices, and frequently by unskilled workers who were taught the various trades according to their abilities. Every working printing office had its quota of apprentices who were sometimes bound from infancy to help in any manner they could and learn the trade.[44] That in the

course of their training they must have learned something of the various steps in bookbinding cannot be doubted, though no specific mention has been found of an apprentice binder in the records examined for this report. William Hunter's day book for August 28, 1750, lists the following item:

"Bookbinding Dr. to the Est. of Robt. Stevenson
For a Servant Lad, Paul, and sundry Bookbinding
Tools 17.-5.-3."

This item, being charged to bookbinding, might indicate that the servant lad was to work at bookbinding.

Probably the most important labor source was the emigrant. He usually came to the colonies having a background of apprenticeship and occupation in his craft in England or Scotland and sometimes had his own tools. He frequently brought what distinction is to be found in both printing and binding during the colonial period.45 Occasionally adults came to the trade under terms of indenture and were set to learn the various operations in the printing office. Some of these had considerable backgrounds in other fields and for one reason or another chose the indenture route for entry to the new country. George Webb, who was indentured to Keimer in Philadelphia, was an Oxford scholar. Franklin speaks of him at some length in his *Autobiography*.46 In Williamsburg, Joseph Royle had working in his office an indentured servant, George Fisher, "by trade a bookbinder."47 Although the apprentice system supplied a number of reasonably well trained new craftsmen, journeymen seem to have been very scarce throughout the colonial period. Not only they but also their masters, were constantly on the move from one colony to another. Jonas Green, as journeyman and master, worked in three colonies; William Goddard in four; William Bradford and Benjamin Franklin each in two in addition to their employment in England; and William Parks in three English towns before he came to Annapolis and later settled in Williamsburg. The journeymen were even more inclined to change locations than the masters.48 There was generally not enough work in the printing offices, nor was it constant enough, to justify the masters in training many apprentices. On the other hand, wages could not be paid on a full time basis which would have inclined more to take up the trade. Skilled journeymen, however, were able to pick up good jobs without much difficulty, especially if their training enabled them to work in several capacities. Stephen Potts, Franklin's binder, worked at press and possibly at other jobs for which there was need of a hand49 and John Stretch, a journeyman printer for William Hunter, and probably also for Parks, seems to have done much of the binding.50

Runaways were a constant problem to the colonial printer. Nicholas Classen, a printer indentured to William Bradford, ran away and was advertised for in the *American Weekly Mercury* for June 13, 1728,51 with a reward for his return. Hugh Gaine constantly advertised for journeymen and offered unflatteringly small rewards for the return of runaways. He described one as "pretty much pitted with the Small-Pox, wears his own hair and is much bloated by Drinking, to which he is most uncommonly addicted."52 William Goddard advertised in his *Maryland Journal* in 1773 that he "wanted Immediately, one or two sober Journeymen Printers who can and will work."53 Joseph Royle of Williamsburg inserted the following advertisement in the *Maryland Gazette* for May 2, 1765:

"Williamsburg, April 23, 1765

Run away from the Printing-Office, on Saturday Night, a Servant man named George Fisher, by trade a Book-Binder, between 25 and 26 years of age, about 5 feet 5 inches high, very thick, stoops much, and has a down look; he is a little Pock Pitted, has a Scar on one of his Temples, is much addicted to licquor, very talkative when drunk, and remarkably stupid. He had on, and carried away with him, several good white Linen Shirts, a Snuff color'd Cloth Coat, and a Suit of Light color'd Segathy, other good Wearing Apparel, a new Half-cut black Bob Wig, and a Set of Silver Buckles.

Whoever apprehends the said Servant, and conveys him to the Printing Office, in Virginia, shall have Five Pounds Reward, and if taken out of the Colony, TEN POUNDS, besides what the Law allows.

Joseph Royle."

Evidently he must have been apprehended and returned for the New York *Gazette* or the *Weekly Post Boy* for September 19, 1765, carries the following notice under the Williamsburg date line of August 2:

"Broke gaol, last Saturday night a servant man, named George Fisher, by trade a Book-Binder." . . . 54

That individuals of such evident unreliability were found at all necessary to the printing operations of the colonies is a pointed commentary on the general labor situation.

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1 George Parker Winship, "Facts and Fancies" *The Colophon*, N. S. III No. 4,534.

2 Benjamin Franklin, *Autobiography* (N. York, Holt, 1916) 102; see also George Simpson Eddy, *Some Account Books kept by Benjamin Franklin* (New York, 1929) 38.

3 Hellmut Lehmann--Haupt ed., *Bookbinding in America, Three Essays* (Portland, Southworth-Anthoesen Press, 1941); ref. in Hannah Dustin French, *Early American Bookbinding by Hand, 1636-1820*, pp. 13-14.

4 Lawrence C. Wroth, *The Colonial Printer* (Portland, Southworth-Anthoesen Press), 1938, p. 195.

5 Ibid, p. 195

6 Ibid, p. 195

7 Ibid, p. 195-196

8 Ibid, p. 196

9 Ibid, p. 196

10 Ibid, p. 197

11 Ibid, p. 197; see also note 3, p. 325.

12 French, p. 27.

13 Wroth, *Colonial Printer*, pp. 169-171.

14 Ibid, p. 198.

15 Ibid, p. 199. There are some interesting similar examples in the Maryland Hall of Records, at Annapolis.

16 Wroth *William Parks, Printer and Journalist of England and Colonial America*, (Richmond, Appeals Press, 1926) p. 39, note 12; see also, Wroth, *Colonial Printer*, p. 199.

17 French, *Early American Bookbinding by Hand*, pp. 18-30, contains an extended discussion of decorative development on early American bindings from which these paragraphs are drawn; see also Wroth, *Colonial Printer*, pp. 203-209.

18 Wroth, *Colonial Printer,* pp. 203-209 and French, *Early American Bookbinding by Hand,* pp. 18-30. The author's personal examination of a large number of ornamented early American books fully bears out the conclusions in works referred to.

19 French, p. 21, ref. in Thomas J. Holmes, *Proceedings of the American Antiquarium Society,* n. s. XXXVII, 39.

20 Ibid, p. 21.

21 Ibid, p. 21

22 A. C. Prime (Comp.) *The Arts and Crafts in Philadelphia, Maryland and South Carolina, Gleanings from Newspapers* (Walpole Society, Topsfield, Mass. 1929, 2 v.) I, 27-28.

23 French, p. 28.

24 Wroth, *Colonial Printer,* p. 202-3.

25 *Minutes of the Commissioners appointed to Inspect the Public Records of the Province* [Maryland] June 4, 1729, p. 147.

26 Eddy, v 1, p 40.

27 French, p. 91, Ref. to Wroth, "Notes for Bibliophiles," New York *Herald Tribune,* Feb. 12, 1929.

28 See Joseph W. Rogers, "The Rise of American Edition Binding," in Lehmann-Haupt, ed., *Bookbinding in America,* p. 135.

29 Wroth, *Colonial Printer,* p. 161.

30 Wroth, *Colonial Printer,* p. 161-162.

31 Wroth, *Colonial Printer,* p. 181. This document is in the American Antiquarium Society, Worcester, Mass.

32 Wroth, *Colonial Printer,* p. 182.

33 Ibid, p. 198.

34 Ibid, p. 200.

35 Wroth, *Colonial Printer,* p. 200.

36 Ibid, p. 201.

37 Ibid, p. 201.

38 Ibid, p. 201.

39 Wroth, *Colonial Printer,* p. 201.

40 Ibid, p. 202.

41 The original day books kept by William Hunter and Joseph Royle are in the Alderman Library, University of Virginia, Charlottesville, Va. Colonial Williamsburg has photostat copies.

42 Wroth, *Colonial Printer,* p. 154-155.

43 French, 76-77.

44 Wroth, *Colonial Printer,* p. 156-157.

45 French, p. 27.

46 Franklin, *Autobiography,* p. 103.

47 *Maryland Gazette,* May 2, 1765, Advertisement for runaway.

48 Wroth, *Colonial Printer,* p. 103.

49 Wroth, *Colonial Printer,* p. 159.

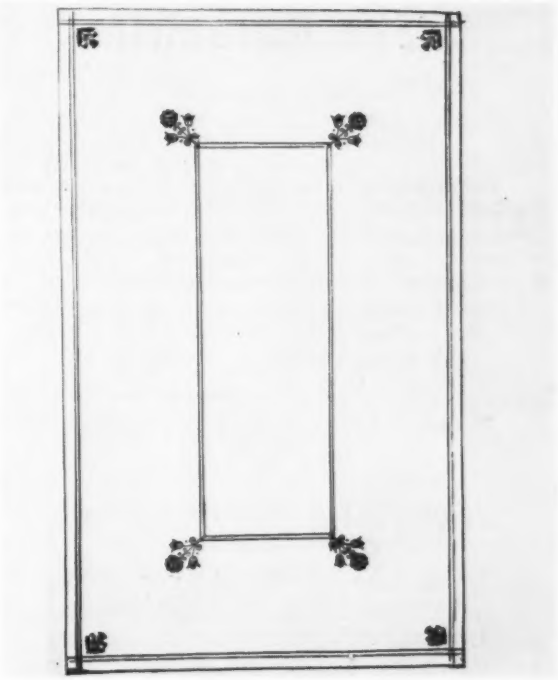
50 *Hunter Day Book,* 1750-52, Entry for Dec. 11, 1751, Wages charged to Bookbinding.

51 Wroth, *Colonial Printer,* p. 160.

52 Ibid, p. 160.

53 Ibid, p. 160.

54 *The Arts and Crafts in New York* — 1726-1776 (New York, New York Historical Society, 1938).



*This cut illustrates a typical book cover panel done in the so-called Cambridge Style, a common place colonial design.*

*This engraving is taken from Tome VIII of Diderot's Encyclopedia and shows a bookbinding establishment of the last half of the eighteenth century. Pictured are the following operations. Figure A — beating folded sections; B — stitching folded sections on the sewing-frame; C — trimming the edges of a freshly sewn book on a plowing press; and D — pressing freshly bound books in a large standing press. The tools and methods shown here have been used in hand binding, almost unchanged, from ancient times to the present day.*

# The Chronicle

## Early American

## Industries Association, Inc.

The purpose of the association is to encourage the study and better understanding of early American industry, in the home, in the shop, on the farm, and on the sea, and especially to discover, identify, classify, preserve and exhibit obsolete tools, implements, utensils, instruments, vehicles, appliances and mechanical devices used by American craftsmen, farmers, housewives, mariners, professional men, and other workers.

EDWARD DURELL, *President*
500 Dublin Avenue, Columbus, Ohio

LORING McMILLEN, *Vice-President*
Staten Island Historical Society
Richmond, Staten Island, New York

JAMES A. KEILLOR, *Vice-President*
5 Ridgeway Ave., White Plains, N. Y.

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Communications regarding the contents of The Chronicle should be addressed to the Editor; regarding back numbers to Loring McMillen; suggestions for members to any of the Officers; all other matters to the President. Addresses as here given.


## DUES

The annual dues are payable January 1st, and are as follows. Active members $5.00; Helpful members, $7.50; Encouraging members, $10.00; Enthusiatic members, $15.00, and Delighted members, $25.00. There is no distinction between classes, except the amount of dues, but The Chronicle cannot be financed unless a considerable number of the members pay more than $5.00. Each member is expected to voluntarily place himself in the class which represents the amount he is willing to contribute to the support of the Association for the current year. Life membership costs $50.00. The Chronicle is sent to all members without additional charge.

**Printed on the Press of the *Virginia Gazette, Founded 1736.***

## SECRETARIES REPORT

By JANET R. MacFARLANE

The Early American Industries Association, Inc., met at Colonial Williamsburg, Virginia, Oct. 30 through Nov. 1, 1953. The attendance was small, only 48 registered, but the program was one of the most significant ever offered to the Association. Friday morning, after registration, the reception center and the eight major exhibition buildings were open to members, after which the entire group assembled at the Raleigh Tavern Bakery for the formal opening of the bakery and the second floor of the Raleigh Tavern. At luncheon the members were welcomed by Dr. Edward Alexander, Vice President and Director of the Division of Interpretation of Colonial Williamsburg, followed by introduction of master craftsmen by M. W. Thomas, Jr., Director of the Craft Shops. On Friday afternoon, Saturday morning and Saturday afternoon, members were divided into tour groups so that all of the craft shops were visited in rotation, a minimum of forty-five minutes being spent in each shop with opportunity to discuss tools with the master craftsman. In addition to the craft shops, the archaeological laboratory and the Wolcott Tool Collection, which was in the process of being catalogued, were open for inspection.

On Friday evening there was a catered dinner at Williamsburg Lodge, followed by the films "Williamsburg Restored" and "The Colonial Printer," both in color. The fact that Williamsburg master craftsmen were present at luncheon and dinner was of special advantage to the members of the E. A. I. A.

On Saturday afternoon the Board of Directors met at 5:30. At this time a letter of resignation as a director of the Association from Mrs. J. Watson Webb was read and accepted with regret. Suggestions for next year's meeting places were discussed as were matters connected with registration for future meetings of the organization, and the auction. After cocktails and dinner in the ballroom of Williamsburg Lodge, the annual business meeting of members was held, followed by a "What's It" session prepared by Colonial Williamsburg and a "bull session" which the Colonial Williamsburg craftsmen attended. The meeting of members was called to order by Edward Durell, President. Minutes of the previous meeting held in Shelburne, Vt., were approved as read after the addition of a note about the auction which netted the Association nearly $1,100. The Treasurer's report, showing a balance of $1,937.88 was accepted and ordered spread upon the minutes. Mr. Durell spoke of the request for additional publicity for the organization and asked members to return to Mrs. Peirce the questionnaires sent out just prior to the meeting which would list the collections of members. A list of charter members whose addresses have been lost was read and an appeal made for members to assist in locating these persons. Mr. Durell presented a request from the membership committee who suggested that we enter upon a membership campaign. After considerable discussion, and noting that $433. of the Association's bank balance had been raised specifically for membership promotion, it was duly voted by the members that $500. be assigned to the membership committee for such a campaign.

Sunday morning there were further visits to exhibition buildings not included in the scheduled tours, and in the afternoon a drive to the Mariner's Museum at Newport News.

## WHAT IS IT ?

Miss Pauline La Croix of Agawan, Massachusetts would like assistance in identifying the article pictured above. She states she has two such implements which came to her along with an old spinning wheel (treadless type), a quilling wheel, and a clock reel. They came from a very old house in Agawan. The front of the object pictured on the left is 7⅞" in width. The object is 9 inches in height. The oval hole, ⅝" in length and ½" in width, pierces all three sections. The height of the fork like sections is 2". The hole at the top is ¾" in width and ⅝ of an inch in height. The entire piece is made of wood and the holes are crudely cut out. We shall appreciate any answers being forwarded to the Editors.

## CHARTER MEMBERS

Information on the whereabouts of the following Charter Members of the Early American Industries Association has been requested by the secretary, Miss Janet MacFarlane. Members having any information on those persons listed below are urgently requested to forward such information to the Secretary:

Mrs. Harry E. Damon, Hobart Ave., Short Hills, N. J.

J. C. Hood, Chelsea, Vermont.

Percival B. Howe, Jr., 34 Thomas St., New York, N. Y.

Albert E. Lownes, P. O. Box 1531, Providence, R. I.

A. Sheldon Pennoyer, 114 E. 66th St., New York, N. Y.

Joseph A. Skinner, Holyoke, Massachusetts.

J. Vaughn Dennett, 13 Cross Street, Saco, Maine.

## PLYMOUTH MEETING

The Museum Council of Plimoth Plantation, Plymouth, Massachusetts has graciously extended the Early American Industries Association an invitation to hold its Spring meeting at Plymouth. The meeting is tentatively set for June 25, 26, and 27. Early indications are that the program will be an excellent one and the meeting will undoubtedly be memorable. Mr. Arthur G. Pyle, Executive Secretary of Plimoth Plantation, is co-ordinating the program, and members can expect to hear from him as soon as details are worked out. A full report on the Plymouth meeting with pictures will be published in the April issue, but members should make arrangements to attend as soon as possible.

## QUESTIONNAIRE

Recently all members of the Early American Industries Association have or should have received through the mail a mimeographed questionnaire from the office of the Treasurer, Mrs. Josephine Peirce. The questionnaire requesting general information about members, their interests, and collections was to be completed and forwarded to Mrs. Peirce and placed on file. As the January issue of *The Chronicle* goes to press, Mrs. Peirce reports that she has received only 170 answers. She is most anxious to get this information collected before the next annual meeting in June and requests that the questionnaires be filled out and forwarded to her at once. If members have failed to receive a copy of the questionnaire, please contact Mrs. Peirce and she will forward the questionnaire blank.

## SHANNON COLLECTION

It has been called to the attention of the Editors of *The Chronicle* that the Herbert T. Shannon tool collection has been placed on display at the University of Maryland, College Park, Maryland. This excellent collection of early tools and implements is similar to the collection of S. B. Wolcott which is on display at Colonial Williamsburg. Mr. Shannon, a former member of the Early American Industries Association, died in 1946. Members in the Virginia, Washington, Maryland area will certainly want to see this collection. Information concerning the collection may be obtained from Dean S. S. Steinburg, University of Maryland, College Park, Maryland. The printed catalogue of the Shannon collection is an excellent one.

## NEW MEMBERS

*DISTRICT OF COLUMBIA*

*Washington:* Arnold Miles, 6152 Thirty-first St., N. W. (1877)

*FLORIDA*

*West Palm Beach:* C. K. Webber, Box 6111 (1874) (Winter)
(Summer — 1308 Virginia Ave., Cleveland, Ohio)

*NEW YORK*

*Ogdenburg:* Lawrence F. Cuthbert, Newell Mfg., Co. (1879)
*Palantine Bridge:* Harlow F. Coppernoll (1873)
*Port Crane:* Mrs. Doris A. Lalley, R. D. No. 1 (1876)

*PENNSYLVANIA*

*Doylestown:* Miss Ruth Lessey, R. D. No. 2 (1880)
*East Stroudsburg:* O. P. Hoffman, R. D. No. 4 (1870)
*Lancaster:* Paul L. H. Heine, Hotel Brunswick (1871)

*RHODE ISLAND*

*Providence:* Miss Mildred E. Bartlett, 95 Brown St. (1875)

## DECEASED

Samuel Kline, Kings Park, New York (1050)
Harry E. Damon, Short Hills, New Jersey (Charter Member)

## CHANGE OF ADDRESS

Clifford A. Allanson, to 19 Plymouth Ave., Elsmere-Delmar, N. Y.
George S. Armstrong & Co., Inc., to 551 Fifth Ave., New York 17, N. Y.
William H. Ritz, to 13018 Woodside Ave., Cleveland 8, Ohio
Miss Esther Blankenburg, to 180 Bowen St., Providence, R. I.

## CHANGE OF NAME

Mrs. H. T. Mulry, 15 Cold Spring St., Providence, R. I. to Frances D. Bee, same address.

## MAIL RETURNED

Mrs. Martha Rever Conlon, R. F. D. No. 1, Columbia Road, Florham Park, Whipping, N. J.
John D. Hoffman, 1422 Western Ave., Albany, N. Y.
Thomas H. Johnson, Beaver Dam Road, Brookhaven, N. Y.
Dr. J. R. Pawling, 205 Trust Co. Bldg., Watertown, N. Y.
Mrs. Gleason M. McBane, Route No 2, Chardon, Ohio

## IDENTIFICATION

Reference is made to page 40 of the October, 1953 issue of the *Chronicle*. Mrs. Margaret H. Merhoff of Sodus, New York asked assistance in identifying the object that is pictured on page 40 and we wish to report Mr. W. S. Redhed of Champaign, Illinois has come up with an answer. Mr. Redhed writes —

"I have a piece exactly like it which I bought 6 or 7 years ago from a Mr. Jackson (a brother of the man who wrote "*The Lost Weekend*"), somewhere in Central New Jersey. He told me it was for drying boots. By putting one boot over each horn they were dried from both the outside and the inside, since hot air would come up both from the visible holes and also through the horns.

The use of the kitchen range limits its age, and it seems that the range is the only stove to which it would have been suited.

Mr. Jackson seemed sure of his information, and it seems reasonable to me."